

OM-105C / 106C



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ENGLISH

Manufacturer's statement

Read this operation manual carefully before use to ensure proper operation of this product.

Failure to read this operation manual may cause improper operation and may result in serious injury or death of a person.

eanings of the symbols are as follows.

Disregard of the warning symbol can cause improper operation which may cause death or serious injury.

⚠ CAUTION

Disregard of the caution symbol can cause improper operation which may cause injury of a person or damage the object.

NOTE

Special attention is required to the section of this symbol.

NOTE

- 1. This sensor is a non-contact switch intended for header mount/ceiling mount of an automatic door. Do not use for any other applications.
 2. When setting the sensor's detection area, make sure there is no traffic around the installation site.
 3. Before turning the power on, check the wiring to prevent damage or malfunction of equipments that are connected to the sensor.
 4. Only use the sensor as specified in the operation manual provided.
 5. Be sure to install the sensor in accordance with the local laws and standards of the country in which the sensor is installed.
 6. Before leaving the job site make sure that the sensor is operating property and instruct the building owner/operator on proper operation of the door and the sensor.
 7. The sensor setting can only be changed by an installer or service engineer. When changed, register the changed setting and dates in the maintenance logbook accompanying the door.

♠ WARNING

Danger of electric shock

Do not wash, disassemble, rebuild or repair the sensor, otherwise it may cause electric shock or breakdown of the equipment.

NOTE The following conditions are not suitable for the sensor The following conditions are not suitable for the serinstallation.

- Vibrating header or mounting surface.

- Waterdrops or snow on the sensor.

- Moving objects, steel plate, emergency lights or illumination in the detection area or in vicinity.

Specifications

Model Cover color Mounting height Detection method

Transmitter frequency Transmitter radiated po Detection area
Vertical adjustment

Horizontal adjustment Power supply

Operation indicator

Silver / Black 2.0 (6'7") to 3.5 m (11'5") Microwave doppler effect 24.125 GHz See Detection area +10° to +70° (Heade

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See Detection area :+10° to +70° (Header mount) +20° to +80° (Ceilling mount) 30° to left or right 12 to 24 VAC(±10 %) 12 to 30 VDC(±10 %) <-1.5 W(-2 VA at AC) :5 cm(1 15/16°)/s Creen / Stand-by Red / Detection Green blinking / Set-up

Output Form C relay 50 V 0.3 A Max (Resistance load)

Output hold time Response time Operating humidity
Operating temperature

IP rate

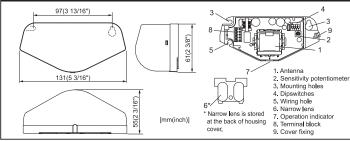
0.5 s/2.0 s < 0.3 s < 80 % -20°C to +55°C (-4°F to 131°F) IP54

IP54
140 g (4.9 oz)
1 Cable 3 m (9'10")
1 Operation manual
2 Mounting screws
1 Mounting template
1 Narrow lens*

* At the back of housing cover

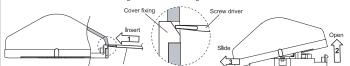
NOTE The specifications herein are subject to change without prior notice due to improvements.

Outer dimensions and part names



Installation

- Place the mounting template at the desired mounting position.
- Drill 2 mounting holes of ø3.4 mm (ø1/8") To pass the cable through to the header, drill a wiring hole of ø8 mm (ø5/16").
- Remove the mounting template.
 Remove the housing cover with screw driver as shown below.
 Attach the sensor to the mounting surface with 2 mounting screws.



Screw driver Wire the cable to the door controller properly as shown below. Power supply 12 to 24 VAC ±10 % 12 to 30 VDC ±10 % ⊐ White Ø2 Brown **3** ⊒ Green Relay ⊐ Yellow -----③-④ N.O. (A) (4) ③-⑤ N.C. 0

♠ WARNING Danger of electric shock

Before starting the procedure, ensure that the power is turned OFF. When passing through the cable to the hole, make sure not to tear the shield, otherwise it may cause electric shock or breakdown of the sensor.

 Plug the connector of the sensor.
 Supply power to the sensor and the sensor will automatically start the set-up mode with blinking Green. 3. Adjust the detection area and set the Dipswitches. (See Adjustments)

NOTE Make sure to connect the cable correctly to the door controller before turning the power ON. The sensor does not detect objects for 10 s after supplying power.

Hook the housing cover on the left side of main body to place the housing cover. If wiring is to be exposed, break the knockout.

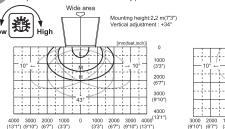
. WARNING

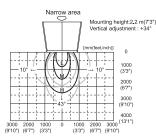
Do not use the sensor without the housing cover. When using the cable knockout, install the sensor indoors or use the rain-cover (Separately available) otherwise electric shock or breakdown of the sensor may occur.

Adjustments

Detection area

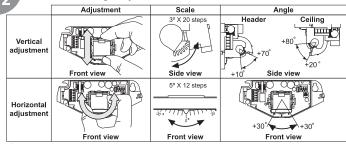
Adjust the detection area with Sensitivity potentiometer





NOTE When the sensor is mounted at higher than 3.0 m, set the Sensitivity to "H"(High).

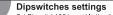
Detection area angle adjustment



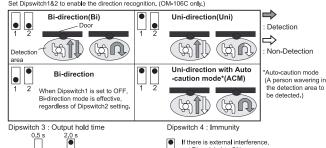
CAUTION Do not touch electric part of the sensor to avoid possible breakdown of the sensor.

To obtain Narrow area, place Narrow lens attached at the back of housing cover. To place Narrow lens, follow step1&2 as shown on the right.





Set Dipswitch1&2 to enable the direction recognition, (OM-106C only.)





set Dipswich 4 to ON.

Inform building owner/operator of the following items

- 1. Always keep the housing cover clean. If dirty, wipe the housing cover lightly with a cloth. (Do not use any cleaner or solvent.)
 2. Do not wash the sensor with water.
 3. Do not disassemble, rebuild or repair the sensor yourself, otherwise electric shock may occur.
 4. Always contact your installer or service engineer when changing the settings.
 5. Do not paint the housing cover.
 1. When turning the power ON, always walk-test the detection area to ensure proper operation.
- NOTE
 - 2. Do not place any objects that move or emit light in the detection area. (e.g. Plant, illumination, etc.)

Checking

Check the operation according to the chart below

and a production and the state						
Sensor status	Power OFF	Set-up (Approx. 10 s)	Stand-by	Detection		
Operation indicator	OFF	Green blinking	Green	Red		
Output contact	3 -4 5	3 -4 5	3 -4 5	(A) (B) (B) (B) (B) (B) (B) (B) (B) (B) (B		

Troublesh	ooting			
Problem	Operation indicator	Possible cause	Possible countermeasures	
Door does not	None	Wrong power supply voltage.	Set to the stated voltage.	
open when a	Unstable	Wrong wiring or connection failure.	Check the wiring and Terminal block.	
person enters	Green	Sensitivity is too low.	Set the sensitivity higher.	
the detection		Wrong detection area positioning.	Check Adjustments.	
area.	Green blinking	The sensor is being set up.	Wait for the set-up to complete.	
Door opens when no one is in the detection	Red	Water drops on the housing cover. The detection area is overlaping with the door.	Wipe the housing cover with a cloth. Adjust the detection area away from the door. Or set Dipswitch4 to ON.	
area.		Sensitivity is too high.	Set the sensitivity lower.	
(Ghosting)		Raining or snowing.	Set Dipswitch1 to ON.(OM-106C only) Or Dipswitch4 to ON.	
Door remains open	Green	Wrong wiring or connection failure.	Check the wiring and Terminal block.	

Hereby, OPTEX declares that the radio equipment type OM-105C/106C series are in compliance with RED 2014/53/EU. The full text of the EU DoC is available at the following internet address; www.optex.net

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